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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,076	07/11/2003	Genichi Tanaka	032404-070	3388
7590 03/16/2006 BURNS, DOANE, SWECKER & MATHIS, L.L.P.			EXAMINER	
			LIN, SUN J	
P.O. Box 1404 Alexandria, VA 22313-1404			ART UNIT	PAPER NUMBER
,			2825	
			DATE MAILED: 03/16/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

SIL

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Eachelized from anyb to existed under the provision of 37 CFR 1:18(a), in no event, hower, may a reply to birrely find  If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (s) MONTHS from the maining date of this communication (Fallur to reply within the set or extended period for reply will, by statute, cause the application to become ARANDONIO (36 U.S.C. § 133).  Any reply received by the Office later than these months after the maling date of this communication, even if timely filted, may reduce any seamed placent them applicants. Set of 7 CFR 1:74(b).  Status  1) Responsive to communication (5) filed on 11 July 2003.  2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-14 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-14 is/are allowed.  6) Claim(s) is/are rejected.  7) Claim(s) is/are rejected.  7) Claim(s) is/are rejected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.85(a).  11) The cost or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some *c) Mone o	,	Application No.	Applicant(s)			
Sun J. Lin   2825    - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Repty  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expire SIX (8) MONTHS from the mailing date of this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expire SIX (8) MONTHS from the mailing date of this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expire SIX (8) MONTHS from the mailing date of this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expire SIX (8) MONTHS from the mailing date of this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expire SIX (8) MONTHS from the mailing date of this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expired supplies that the maximum statutory period will apply and well expired to this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well expired to this communication.  - If NO period for reply is pecified above, the maximum statutory period will apply and well applies and period will apply and applies	Office Action Commence	10/617,076	TANAKA, GENICHI			
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Exercisions of time may be available under the provisions of 35° CFR 1.35(a). In no event, however, may a raisply be firmly filed by the provision of 35° CFR 1.35(a). In the revent, however, may a raisply be firmly filed by the provision of the provision of 35° CFR 1.35(a). In the revent, however, may a raisply be firmly filed by the provision of the provis						
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Estatemions of time may be waited under the provisions of 37 CFT 1.13(m), in no event, however, may a reply be lemby field after SIX (6) MODITIS from the mailing date of this communication.  Fealure to reply which the set of extended period for reply will, by stable, cause the application to become ABANDONED (30 U.S. C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely fifed, may reduce any samed patent managisterium Sea 7 CFR 1.74(e).  Status  1) ■ Responsive to communication(s) filed on 11 July 2003.  2a) ■ This action is FINAL.  2b) ■ This action is non-final.  3) ■ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ■ Claim(s) 1-14 is/are pending in the application.  4) Of the above claim(s) is/are withdrawn from consideration.  5) ■ Claim(s) is/are rejected.  7) □ Claim(s)		ears on the cover sheet with the c	orrespondence address			
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12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  Attachment(s)  Attachment(s)  Attachment(s)  Attachment(s)  Attachment(s)  A Discovery Statement(s) (PTO-892)  A Discovery Statement(s) (PTO-1449 or PTO/SB/08)  A Discovery Statement(s) (PTO-152)	10) ☐ The drawing(s) filed on 7/11/2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
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Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	<ul> <li>a)</li></ul>					
Paper No(s)/Mail Date  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Notice of Informal Patent Application (PTO-152)	Attachment(s)					
Patent and Trademark Office	2) Notice of Draftsperson's Patent Drawing Review (PTO-948) B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa	te			

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### **DETAILED ACTION**

This office action is in response to application 10/617,076 filed on 07/11/2003.
 Claims 1 – 14 remain pending in the application.

#### **QUAYLE ACTION**

2. This application is in condition for allowance except for the following formal matters:

## Specification Objections

Page 19, line 6, change "the user" to —a user—.

Page 19, line 7, change "timing constraints modification unit" to —timing constraint modification unit—.

## **Drawing Objections**

- Fig. 1, change "TIMING CONTRAINTS FILE" TO —TIMING CONSTRAINT FILE—.
- Fig. 1, change "NEW TIMING CONTRAINTS FILE" TO —NEW TIMING CONSTRAINT FILE—
  -.
- Fig. 1, change "TIMING CONTRAINTS CREATING DEVICE" TO —TIMING CONSTRAINT CREATING DEVICE—.
- Fig. 1, change "TIMING CONTRAINTS MODIFICATION UNIT" TO —TIMING CONSTRAINT MODIFICATION UNIT—.

## Claim Objections

Claim 1, line 9, change "includes" to —include—.

Claim 1, line 11, change "the cells" to —cells in the parent block—.

Claim 1, line 13 – 14, change "the datapath extracted" to —a datapath extracted—.

Claim 2, line 2, change "datapath" to —datapaths—.

Claim 3, line 2, change "datapath" to —datapaths—.

Claim 6, line 2, change "the datapath having a timing error" to —the datapaths having timing error—.

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Claim 7, line 2, change "of datapath" to —of each datapath—. Claim 8, line 2, change "the datapath" to —each datapath—. Claim 11, line 1 – 2, change "the datapath" to —a datapath—. Claim 12, line 1 – 2, change "the datapath" to —a datapath—. Claim 13, line 1 – 2, change "the datapath" to —a datapath—. Claim 14, line 1 – 2, change "the datapath" to —a datapath—.
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Appropriate corrections are required.

the following subject matter:

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

#### Reasons for Allowance

- The following is an examiner's statement of reasons for allowance:Claims 1 14 are allowed because the prior art does not teach or fairly suggest
  - A device for creating timing constraints for semiconductor integrated circuit designed using a hierarchical design, the device comprising <u>a datapath</u> <u>extraction unit that extracts datapaths, which are between at least two child blocks in a parent block, to be performed timing verification, a datapath output unit that creates a datapath list which allows a user to selectively specify a <u>timing exception corresponding to a datapath extracted</u> and <u>a timing constraint modification unit that creates new timing constraints by modifying existing timing constraints based on the timing exception specified by the user</u></u>

### Conclusion

in combination with other limitations as recited in independent Claim 1.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Sun James Lin* whose telephone number is (571) 272 - 1899. The examiner can normally be reached on Monday-Friday 9:30AM - 6:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Chiang* can be reached on (571) 272 - 7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sun James Lin

Primary Examiner

Art Unit 2825

March 13, 2006